

ABSTRACT

Wafer contamination is prevented, while preventing damage to a high-frequency electrode and a susceptor. A main body 41 of the susceptor 40 of an MMT apparatus is composed of a heater arranging plate 42, an electrode arranging plate 48, and a supporting plate 56 all made from quartz. A circular electrode arranging hole 49 with a fixed depth is concentrically formed on the upper surface of the electrode arranging plate 48, and quadrangular pillars 50 are formed protruding in a matrix on the bottom of the electrode arranging hole 49. Multiple insertion holes 52 are formed in a disk-shaped high-frequency electrode 51, and the high-frequency electrode 51 is installed in the electrode arranging hole 49 by inserting each pillar 50 into each insertion hole 52. The gaps Sa and Sb are provided between the high-frequency electrode 51 and the electrode arranging plate 48. The pillar 50 boosts the strength of the electrode arranging plate 48. Damage to the high-frequency electrode is prevented even if the thermal expansion coefficient of the high-frequency electrode is larger than that of the electrode arranging plate, since the gaps absorb the thermal expansion differential.